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ABSTRACT

The article describes a study of consumer education materials and practices, and suggests guidelines for developing economic education material and programs. Objectives of the study were to (1) assess the effectiveness of consumer-related courses in junior and senior high schools, (2) examine the extent to which students learn consumer-related skills at school, and (3) suggest types of consumer skills educators should teach adolescent students. The skills included consumer affairs knowledge, consumer finance management, and economic motivations for consumption. A sample of 806 adolescents from 13 schools in Wisconsin completed self-administered questionnaires containing skill-related questions and background information about family's socioeconomic status and number of consumer-related courses taken in school. Response data indicated that older students possess the skills to a greater extent than younger students and that middle-class students scored higher than lower-class students. Number of consumer-related courses taken at school did not correlate with degree of skill development. The authors concluded that students learn these skills outside the classroom and that, consequently, course content and teaching methods should be revised. (Author/AV)

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FORMAL CONSUMER EDUCATION: AN EMPIRICAL ASSESSMENT

BY

George P. Moschis and Gilbert A. Churchill, Jr.

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FORMAL CONSUMER EDUCATION: AN EMPIRICAL ASSESSMENT

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FORMAL CONSUMER EDUCATION: AN EMPIRICAL ASSESSMENT

HEADNOTE

Consumer education materials and practices have recently been criticized on the grounds that they teach young people very little about effective consumer behavior. This article presents the results of a large-scale study designed to empirically assess the effectiveness of formal consumer education materials and practices in over one dozen junior high schools and senior high schools offering a wide variety of consumer-related courses. Guidelines for developing economic education materials and programs are suggested.

INTRODUCTION

In recent years, educators have shown increasing interest in consumer socialization, that is, the process by which young people acquire consumption-related skills, knowledge, and attitudes. Because of the consumer education movement and the various public policy issues concerning the effects of promotion on young people, there has been a renewed interest in the education of children for effective interaction with the marketplace. Evidence of this interest is attested to by the growing number of states that have recently included consumer education classes in their school curricula.

The school is usually charged with the responsibility of "preparing the youth to function as adults by giving them the skill, attitude, and knowledge bases necessary for good citizenship and economic self-sufficiency" [1, p. 844]. Economic competence, for example, is widely accepted as one of the goals of elementary school education. Among the areas of focus of elementary economic education courses has been the emphasis on knowledge and skills, such as understanding of business terms and practices, some basic vocabulary of economics, intelligent money management, and the ability to select and use goods and services wisely [3].

In spite of the common belief that school is the main source of young people's positive consumer behaviors, the existing consumer education materials and practices have been criticized on the grounds that they teach young people very little about effective consumer behavior [7]. Recent research findings tend to confirm such criticisms. For example, a national study released by the National Assessment of Educational Progress found that a

small percentage of 13 year olds can choose the most economical buy at a supermarket, and few 17 year olds understand basic economic concepts [4]. Two other smaller-scale studies conducted in different states report no relationship between the amount of consumer-related courses the adolescent takes at school and the development of his consumer knowledge [5,6].

This article presents the findings of a large-scale study of formal consumer education materials and practices and suggests guidelines for developing economic education material and programs. The specific objectives of the study were the following: (1) to assess the effectiveness of consumer-related courses taught at junior and senior high schools; (2) to examine the extent to which adolescent students learn (or do not learn) specific consumer-related skills at school; and (3) to suggest types of consumer skills educators should attempt to teach to various segments of adolescent students. The specific consumer skills examined in this research were fairly representative of those emphasized in various school consumer-related courses: consumer affairs knowledge, consumer finance management, economic motivations for consumption, information seeking, and effective consumer activities (wise selection and use of products).

THE STUDY

Sample

The sample for this study consisted of 806 adolescents from 13 schools in seven towns and cities in urban, suburban, semi-rural, and rural Wisconsin. Some of the schools were chosen on a convenience basis and some on a random basis. Cooperation was requested from officials at middle schools and senior high schools and questionnaires were delivered to those who agreed to participate. These self-administered questionnaires were filled out by students during regular class sessions and took approximately 30-45 minutes

to complete. Most of the classes chosen by school officials to participate in the survey were consumer-related courses such as home economics and consumer education. Because of this, the sample contained a disproportionate number of females, almost two-thirds. The sample was well-balanced, thorough, with respect to age, geographical location, and social class.

Definition and Measurement of Variables

The knowledge of consumer affairs concept comprised two specific variables: knowledge of economic and business concepts and knowledge of consumer-related legislation. Knowledge of economic concepts referred to the accuracy of cognitions held with respect to basic terms in the following areas: economics, banking, finance, insurance, real estate, and marketing. Knowledge of consumer legislation referred to cognitions held with respect to unit pricing, bait advertising, code dating and remedies available to consumers. Respondents were asked to indicate if statements like "When you buy stock, you own part of a company" and "Milk sold in the store must show the last date it can be sold" were true, false, or don't know. The number of correct answers given by each respondent was used as the individual's score. The accuracy index could and did range from 0 to 11; its reliability, as measured by coefficient alpha, was .57.

Consumer finance management referred to the ability to correctly price selected expense items in an average family's monthly budget. Respondents were asked to estimate about how much the average American family with two children and a total monthly income of $1,000 spends on each of the following items: food, clothes, home expenses, automobile expenses, other expenses, and savings. Respondents were assigned a score of 5 for responses falling approximately within plus or minus 10 percent of the actual expense item

estimates, a 4 for responses falling within plus or minus 20 percent of the actual figures, 3 for responses falling within plus or minus 30 percent, a 2 for responses falling within plus or minus 40 percent, and a score of 1 for responses falling approximately within plus or minus 50 percent or more of the actual estimtes. The actual estimates for the expense items were obtained from the U.S. Department of Labor. The accuracy index could range from 6 to 30; its reliability coefficient was .61.

Economic motivations for consumption were operationally defined as cognitive orientations concerning the importance of products' functional and economic features; orientation toward comparison shopping and significant discriminating attributes. This variable was measured on a 0 to 25-point index by summing responses to consumption situations possessing various degrees of such properties. Respondents were asked to check whether they thought it was important to know five different items before buying a bicycle, watch, camera, pocket calculator, or hair dryer:

Guarantees on different brands,

Name of the company that makes the product,

Whether any brands are on sale,

Kinds of materials different brands are made of,

Quality of store selling a particular brand.

Responses were summed across each item to form a 0 to 5-point index for each item. Thus, scores could range from 0 to 25. The reliability of this five-item scale (coefficient alpha) was .69.

Information seeking was operationally defined as an expressed need to consult various information sources prior to purchase. Measurement of the extent of information seeking was made by summing the number of sources

the adolescent might rely upon for information or advice prior to purchasing a camera, hair dryer, pocket calculator, bicycle, or a wrist watch. Alternative information sources were "friends," "TV ads," "salespersons," "consumer reports," "one or both of my parents," and "newspaper or magazine ads." The products were selected on the basis of previous studies, relevance to adolescents' consumer behavior, and amount of socioeconomic and performance risk. Previous researchers have used this approach and suggested its desirability. The alpha reliability coefficient was .37.

Consumer activism refers to the ability to buy and use products and services in a rational and efficient way. It was measured by summing responses to seven items measured on a 5-point, "quite a lot - don't know" scale. Typical items were "I plan how to spend my money," "I carefully read most of the things they write on packages or labels," and "I compare prices and brands before buying something that costs a lot of money." The index could range from 7 to 35; its reliability, as measured by coefficient alpha, was .64.

Formal consumer education referred to the number of consumer-related courses taken at school. Students were asked to state the "Number of courses they have taken" in each of the following areas: consumer education, home economics, economics, environmental sciences, and guidance (job education). They were also asked to write the names of any other courses in which they had studied about consumer matters. Number of courses taken in all areas was summed to form a single index. Finally, socioeconomic status of the adolescent student was measured using Duncan's socioeconomic scale of occupations [2].

RESULTS

Individual Differences

The first consideration in analyzing data for this study was the extent to which the five consumer-related skills vary by socioeconomic and demographic characteristics of the adolescent student. Previous socialization research suggested that the degree to which young people possess these skills may be affected by maturational factors (age), social class and sex of the respondent [7].

Table 1 shows mean values of the five dependent consumer skill measures for younger (6th, 7th, and 8th graders) and older (9th through 12th graders) adolescents. The data show that older adolescents possess the five skills to a significantly greater extent than their younger counterparts, suggesting that maturation may be a factor contributing to the adolescent's development of these skills.

Table 2 shows mean values of the dependent variables for the two main social classes represented in our sample. The table shows that middle class adolescents have greater consumer-related knowledge, they are better able (or prepared) to manage consumer finances of a typical family budget, and they have stronger economic (rational) motivations for consumption than their lower-class counterparts. Middle-class adolescents also scored higher on the information seeking and consumer activism measures than lower-class respondents, but these differences were not statistically significant.

Some significant sex differences also emerged. Table 3 shows that male adolescents have greater consumer knowledge than their female counterparts. Female respondents, however, scored higher on the information seeking measure than male adolescents. No other significant sex differences emerged.

Table 1

MEAN VALUES OF DEPENDENT VARIABLES FOR YOUNGER AND OLDER ADOLESCENTS[a]

Dependent Variables	Younger Adolescents	Older Adolescents	t-value
	(N=441)	(N=365)	
Consumer Knowledge	5.37 (1.82)	6.54 (1.76)	83.70***
Consumer Finance Management	15.41 (4.69)	16.07 (4.92)	4.10*
Economic Motivations	15.56 (5.96)	16.46 (6.02)	4.52*
Information Seeking	11.17 (4.63)	12.07 (5.12)	6.88**
Consumer Activism	23.80 (3.25)	24.56 (3.42)	10.45***

[a]Table entries are mean values for each group. Standard deviations are shown in parentheses.

*Significant at .05 level.
**Significant at .01 level.
***Significant at .001 level.

Table 2

MEAN VALUES OF DEPENDENT VARIABLES FOR
LOWER-CLASS AND MIDDLE-CLASS ADOLESCENTS[a]

Dependent Variables	Lower-Class	Middle-Class	t-value
	(N=563)	(N=243)	
Consumer Knowledge	5.79 (1.86)	6.16 (1.92)	6.43**
Consumer Finance Management	15.33 (4.60)	16.60 (4.50)	13.09***
Economic Motivations	15.61 (6.03)	16.81 (5.83)	6.86**
Information Seeking	11.43 (4.87)	11.92 (4.88)	1.70
Consumer Activism	24.06 (3.33)	24.36 (3.38)	1.37

[a]Table entries are mean values for each group. Standard deviations are shown in parentheses.

*Significant at .05 level.
**Significant at .01 level.
***Significant at .001 level.

Table 3

MEAN VALUES OF DEPENDENT VARIABLES FOR MALE AND FEMALE ADOLESCENTS[a]

Dependent Variables	Male Adolescents	Female Adolescents	t-value
	(N=281)	(N=525)	
Consumer Knowledge	6.19 (2.00)	5.75 (1.80)	10.16***
Consumer Finance Management	15.45 (4.58)	15.86 (4.62)	1.43
Economic Motivations	15.56 (5.92)	15.18 (6.03)	1.96
Information Seeking	11.11 (5.19)	11.83 (4.68)	4.10*
Consumer Activism	23.94 (3.35)	24.26 (3.34)	1.73

[a]Table entries are mean values for each group. Standard deviations are in parentheses.

*Significant at .05 level.
**Significant at .01 level.
***Significant at .001 level.

Effectiveness of Consumer-Related Courses

Formal consumer education at school was expected to correlate positively with the respondent's consumer knowledge, economic motivations for consumption, information seeking, and consumer activism.

Table 4 shows relationships between each of the five consumer skills and the total number of consumer-related courses the adolescent had taken at school through spring 1976, with the effects of the respondent's characteristics (age, socioeconomic background, and sex) removed. The data show that the total consumer-related courses taken at school (the average for the sample was 3.33) do not correlate significantly with any one of the five consumer skills. The correlations are fairly low (0 to $\pm$ .04) and not statistically significant.

Since the formal consumer education measure was constructed by summing the number of consumer-related courses the respondent had taken at school, the assessment of the effects of formal consumer education may be difficult because different sources may emphasize different aspects of consumer behavior, not necessarily all those that our dependent variables were trying to measure. Thus, it seemed appropriate to analyze the influence of formal consumer education on the development of the five skills in terms of each type of consumer-related course. Furthermore, we considered the possibility that different emphasis may be placed in the various courses taught at junior high schools as compared to those taught at senior high schools. Even the possibility that the child's cognitive development stage may affect his ability to learn the various material was considered.

In examining the effectiveness of each type of consumer-related course on the five consumer skills among younger and older adolescents, no significant differences emerged. The correlations were again small and not statistically significant. These findings suggest that the different content emphasized in the

Table 4

RELATIONSHIPS BETWEEN SELECTED CONSUMER SKILL MEASURES AND FORMAL CONSUMER EDUCATION, CONTROLLING FOR AGE, SOCIAL CLASS, AND SEX[a]

Dependent Variables	Formal Consumer Education	Age	SES	Sex
Consumer Knowledge	.02	.30***	-.00	-.09**
Finance Management	.03	.08*	.11***	.04
Economic Motivations	.04	.04	.09**	.04
Information Seeking	-.01	.07	.07	.06
Consumer Activism	-.04	.11*	.00	.09**

[a]Table entries are partial correlation coefficients (i.e., correlations between each consumer skill and the respective independent variable with the effects of other explanatory factors removed).

*Significant at .05 level.
**Significant at .01 level.
***Significant at .001 level.

various types of consumer-related courses has no significant effect on the child's learning of any of the five specific skills examined.

DISCUSSION AND IMPLICATIONS

This study found little evidence that formal consumer education contributes much to the adolescent's learning of various consumer skills, a finding that is consistent with the results of smaller-scale studies using samples of students from North Dakota and Kentucky. At least three possible factors might account for this finding. First, the instructional material may not contain information useful in teaching the young people the effective aspects of consumption as defined in this research. Second, instructors may be using ineffective methods of teaching socially desirable consumer skills. Third, some other variable is associated with the student's propensity to take consumer-related courses, for example, students who make poor grades at school (are not as capable of learning) might perceive such courses to be of little difficulty. Other researchers have pointed out the first two possibilities.

Future research could examine the reason(s) for failure to learn consumer skills at school. The data in the present study could not answer questions regarding the low correlations found between, for example, the number of consumer-related courses taken at school and the amount of consumer affairs knowledge. Studies in this area could examine the effects of present consumer education materials and practices under carefully controlled experimental conditions.

The results of this study provide some useful guidelines for the development of adult and adolescent consumer education curricula.

First, they suggest the need to reevaluate (a) the content of consumer education materials, (b) practices or methods of teaching economic material to youngsters, (c) goals of consumer education in general, and (d) the targets of students who are to receive certain type(s) of economic education. Some

researchers, for example, have suggested that economic education should depart from the traditional pattern of teaching young people things such as descriptions of various institutions and their functions, suggesting instead that it should be based on information processing notions gearing the content of education programs to age-related abilities to comprehend [8].

Consumer education materials and practices designed to teach adolescents how to be effective consumers should emphasize (1) socially desirable consumer acts (e.g., comparison shopping), (2) economic or rational aspects of the consumer decision making process, (3) use of certain sources of consumer information, (4) knowledge about consumer legal rights and business terms in the marketplace, and (5) skills for budgeting and managing consumer finances.

Consumer educators should also know that the greatest need for consumer education in school appears to exist among adolescents from lower socioeconomic families. Lower-class adolescents should be taught how to budget money, economic concepts, legal rights of consumers in the marketplace, and to develop the economic motivations for consumption possessed to a greater extent by their middle-class counterparts. Furthermore, male adolescents appear to lag behind female adolescents on the ability to use consumer information sources prior to decision making, while female adolescents have a greater need than males to be provided with information that would increase their knowledge about consumer matters.

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